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UNISYS CORPORATION
UNISYS WAY
MAIL STATION: S1-108
BLUE BELL, PA 19424

EXAMINER
HENRY, MARIEGEORGES A

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2455	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/540,909	LOBOZ ET AL.	
	Examiner	Art Unit	
	Marie Georges Henry	2455	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 March 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-9 and 11-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 3-9, and 11-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This is in response to the amendment filed on 3/16/2010. Claims 2, 10, and 16-17 are cancelled. Claims 1, 3-9, and 11-15 are pending. Claims 1, 3-9, and 11-15 are related to accuracy of the estimation of computer resource usage.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 101

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirement of this title.

3. Claims 1, 3-8 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims are directed to "computer readable media tangible comprising instructions." The specification does not preclude the term "computer readable media" to be transmission media such as electromagnetic waves. Electromagnetic waves are not processes, machines, manufactures, or compositions of matter within the meaning of 35 U.S.C. 101, and therefore the claims are not directed to statutory subject matter. The examiner suggests amending the claims to "non-transitory computer readable media" in order to overcome the 101 rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, ff the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 3-9, and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Al- Hilali** in view of **Rivera** et al. (hereinafter "Rivera") (**US 6, 056, 786**).

Regarding claim 1, Al-Hilali discloses computer readable media tangibly comprising instructions which, when executed by a processor, cause the processor to implement a method of improving the accuracy of an estimate of computing system resource usage, comprising:

obtaining utilization data of a system resource (Al-Hilali, column 8, lines 39-40, a model for assessing total resource usage by the server application is disclosed),

obtaining first transaction count data, the first transaction count data providing an indication of the number of transactions executed in a given time interval (Al-Hilali, column 11, lines 59- 61, a number of transactions is made in a certain amount of time),

obtaining further transaction count data, the further transaction count data comprising contains additional information relating to the execution time of a transaction (Al-Hilali, column 12, lines 12-21, the number of CPUs operating combined with the number of transactions made is based to an amount of time), and

processing the transaction count data, the utilization data (Al-Hilali, column 12, lines 1-7, a load generator continually makes log in and out request to a server application), and

the further transaction count data to provide an improved estimate of the number of transactions executed during a given time interval (Al-Hilali, column 12, lines 8-10, a better result is obtained by focusing as close as possible to one application at the time).

Although Al-Hilali discloses a system of counting data transaction, he does not disclose a count of the total number of transactions that have not finished execution within a given time interval.

Rivera discloses a count of the total number of transactions that have not finished execution within a given time interval (Rivera, page 7, lines 8-14, fig.5, the information is gathered into multiple intervals during a longer period of time).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Rivera multiple intervals counting system into Al-Hilali estimating computer utilization system in order to create an estimating utilization computer system with a multiple intervals counting system in order to improve the monitoring of the counting of a system transactions.

Regarding claim 3, Al-Hilali and Rivera disclose the computer readable media of claim 1, wherein the further transaction count data comprises a data set containing the start

time and finish time for each transaction executed (Al-Hilali, column 13, lines 23-62, an application is described with a starting time, log in, and an ended time, log off).

Regarding claim 4, Al-Hilali discloses the computer readable media of a claim 3.

Although Al-Hilali discloses the system of counting data transaction, he does not disclose the system wherein the data set is processed to determine a proportion of time expended by a transaction within the given time interval and an adjacent time interval.

Rivera discloses the system wherein the data set is processed to determine a proportion of time expended by a transaction within the given time interval and an adjacent time interval (Rivera, page 7, lines 8-14, fig.5, the information for a period of time is divided into multiple intervals of that period of time).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Rivera multiple intervals counting system into Al-Hilali estimating computer utilization system in order to create an estimating utilization computer system with a multiple intervals counting system in order to improve the monitoring of the counting of a system transactions.

Regarding claim 5, Al-Hilali and Rivera disclose the computer readable media of claim 1.

Although Al-Hilali discloses the system of counting data transaction, he does not disclose the system wherein processing includes the step of allocating the count of the total number of transactions, by an appropriate proportion, between an adjacent time interval and the given time interval.

Rivera discloses the system wherein processing includes the step of allocating the count of the total number of transactions, by an appropriate proportion, between an adjacent time interval and the given time interval (Rivera, page 7, lines 8-14, fig.5, the information for a period of time is divided into multiple intervals of that period of time).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Rivera multiple intervals counting system into Al-Hilali estimating computer utilization system in order to create an estimating utilization computer system with a multiple intervals counting system in order to improve the monitoring of the counting of a system transactions.

Regarding claim 6, Al-Hilali and Rivera discloses the computer readable media of claim 5.

Although Al-Hilali discloses the system wherein the appropriate proportion is 0.5.

Rivera discloses the system wherein the appropriate proportion is 0.5. (Rivera, page 7, lines 8-14, fig.5, the information for a period of time is divided into two intervals of that period of time is made up).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Rivera multiple intervals counting system into Al-Hilali estimating computer utilization system in order to create an estimating utilization computer system with a multiple intervals counting system in order to improve the monitoring of the counting of a system transactions.

Regarding claim 7, Al-Hilali and Rivera disclose the computer readable media of claim 1, wherein the further transaction data comprises a data set obtained by calculating the average transaction processing time for a given transaction type (Al-Hilali, column 18, lines 19-24, an average of message by second is disclosed), and

using the average transaction processing time to derive an estimate of the transaction time to be allocated to an individual transaction within a given time interval (Al-Hilali, column 18, lines 19-24, the time allocated for a user to access a mail server is disclosed).

Regarding claim 8, Al-Hilali and Rivera disclose the computer readable media of any one of the preceding claims, further comprising instructions which, when executed by

the processor, cause the processor to apply step of applying a mathematical model to the estimate of the number of transactions to provide an estimate of resource usage for individual transaction types within the computing environment (Al-Hilali, column 17, lines 20-40, CPU usage is given by an equation depending on the number of message and rate of delivering the message).

Regarding claim 9, a computing system arranged to facilitate the estimation of resource usage within a computer environment, comprising:

a data gathering means arranged to obtain utilization data of a computer resource and first transaction count data (Al-Hilali, column 8, lines 39-40, column 12, lines 1-5, a model for assessing total resource usage by the server application, the number of log in and out, is disclosed),

wherein the first transaction count data provides an indication of the number of transactions executed in a given time interval (Al-Hilali, column 12, lines 1-5, column 11, lines 59-61, the number of log in and out is measured; a number of transactions is made in a certain amount of time),

further data gathering means arranged to gather further transaction count data (Al-Hilali, column 12, lines 14-16, the percent of CPU utilization is part of determining general system use),

wherein the further transaction count data contains additional information with regard to the execution time of a transaction (Al-Hilali, column 12, lines 12-21, the number of CPUs operating combined with the number of transactions made is based to an amount of time), and

a processor arranged to process the first transaction count data, the utilization data (Al-Hilali, column 12, lines 1-7, a load generator continually makes log in and out requests to a server application) , and

the further transaction count data, whereby the processed data provides an improved estimate of the number of transactions executed during a given time interval (Al-Hilali, column 12, lines 8-10, better result is obtained by focusing as close as possible to one application at the time).

Although Al-Hilali discloses a system of counting data transaction, he does not disclose a count of the total number of transactions that have not finished execution within a given time interval.

Rivera discloses a count of the total number of transactions that have not finished execution within a given time interval (Rivera, page 7, lines 8-14, fig.5, the information is gathered at specific time intervals during a longer period of time).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Rivera multiple intervals counting system into Al-Hilali estimating computer utilization system in order to create an estimating utilization computer system with a multiple intervals counting system in order to improve the monitoring of the counting of a system transactions.

Regarding claim 11, Al-Hilali and Rivera disclose a system in accordance with claim 9, wherein the further data gathering means is arranged to log the start time and finish time for each transaction (Al-Hilali, column 13, lines 23-62, an application is described with a starting time, log in, and an ended time, log off).

Regarding claim 12, Al-Hilali and Rivera disclose a system in accordance with claim 11.

Although Al-Hilali discloses the system of counting data transaction, he does not disclose the system wherein the processing means is arranged to process the data set to determine a proportion of time expended by a transaction within the given time interval and an adjacent time interval.

Rivera discloses the system wherein the processing means is arranged to process the data set to determine a proportion of time expended by a transaction within the given time interval and an adjacent time interval (Rivera, page 7, lines 8-14, fig.5, the

information for a period of time is divided into multiple intervals of that period of time is made up).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Rivera multiple intervals counting system into Al-Hilali estimating computer utilization system in order to create an estimating utilization computer system with a multiple intervals counting system in order to improve the monitoring of the counting of a system transactions.

Regarding claim 13, Al-Hilali and Rivera disclose a system in accordance with claim 9.

Although Al-Hilali discloses the system of counting data transaction, he does not disclose the system wherein the processing means is arranged to allocate the count of the total number of transactions, by an appropriate proportion, between an immediately preceding time interval and the given time interval.

Rivera discloses the system wherein the processing means is arranged to allocate the count of the total number of transactions, by an appropriate proportion, between an immediately preceding time interval and the given time interval (Rivera, page 7, lines 8-14, fig.5, the information for a period of time is divided into multiple intervals of that period of time is made up).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Rivera multiple intervals counting system into Al-Hilali estimating computer utilization system in order to create an estimating utilization computer system with a multiple intervals counting system in order to improve the monitoring of the counting of a system transactions.

Regarding claim 14, Al-Hilali and Rivera disclose a method in accordance with claim 13.

Although Al-Hilali discloses the system of counting data transaction, he does not disclose the system wherein the appropriate proportion is 0.5.

Rivera discloses the system wherein the appropriate proportion is 0.5 (Rivera, page 7, lines 8-14, fig.5, the information for a period of time is divided into two intervals of that period of time).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Rivera multiple intervals counting system into Al-Hilali estimating computer utilization system in order to create an estimating utilization computer system with a multiple intervals counting system in order to improve the monitoring of the counting of a system transactions.

Regarding claim 15, Al-Hilali and Rivera disclose a system in accordance with claim 9, further comprising calculation means, arranged to calculate the average transaction processing time for a given transaction type (Al-Hilali, column 18, lines 19-24, an average of e-mail message, transaction, is disclosed), and

further calculate an estimate of the transaction time to be allocated to an individual transaction within a given time interval (Al-Hilali, column 18, lines 19-24, the time allocated for a user to access a mail server is disclosed).

Response to Argument

6. Applicant's arguments filed on March 16, 2010 with respect to Claim Rejections - 35 USC § 101 of claim 1 has been fully considered, but they are not persuasive because the claimed method steps can be done also by software; as a result, they do not exclude utilization of software to perform those steps; in that particular case the method is not tied to a machine.

Applicant argues in substance that: A) “Rivera clearly fails to teach or suggest obtaining further transaction count data... [including] a count of the total number of transactions that have not finished execution within a given time period” (Remark, page 7, lines 19-22).

In response to A; Although Al-Hilali discloses a system of counting data transaction, he does not disclose a count of the total number of transactions that have not finished execution within a given time interval.

Rivera discloses a count of the total number of transactions that have not finished execution within a given time interval (Rivera, page 7, lines 8-14, fig.5, the information is gathered into multiple intervals, more than one interval is being used).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Rivera multiple intervals counting system into Al-Hilali estimating computer utilization system in order to create an estimating utilization computer system with a multiple intervals counting system in order to improve the monitoring of the counting of a system transactions.

Applicant argues in substance that: B) “neither A1-Hilali nor Rivera, either alone or in combination, teaches or suggests all elements recited in Applicant's claims” (Remark, page 8, lines 1-3).

in response to B;) in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so

found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Al-Hilali's reference teaches an estimating utilization computer feature and Rivera's reference discloses a multiple intervals counting feature.

Conclusion

9. Any inquiry concerning this communication from the examiner should be directed to Marie Georges Henry whose telephone number is (571) 270-3226. The examiner can normally be reached on Monday to Friday 7:30am - 4:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217- 9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to

the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marie Georges Henry/

Examiner, Art Unit 2455

/saleh najjar/

Supervisory Patent Examiner, Art Unit 2455